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ABSTRACT

Participants from 23 states and 4 Canadian provinces attended the Fourth National Conference on Outdoor Education sponsored by the Outdoor Education Project and the Council on Outdoor Education and Camping of the American Association for Health, Physical Education, and Recreation. The conference was primarily a working conference designed to deal with educational issues, problems, and challenges pertinent to outdoor education in the 1970's. Study committee and task force reports will not be completed until the end of the council's current year of operation. Summaries of study group deliberations are included in this report in the areas of outdoor education for inner-city schools, professional preparation, school site development, work-learn experiences for older youth, outdoor education for environmental quality, goals for outdoor education, and research and evaluation. A list of participants is appended. (JH)

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4th national conference

Outdoor Education

October 22-24, 1970

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Sponsored by - The Outdoor Education Project
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AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION

The World of Outdoor Education: Issues - Problems - Challenges

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The Fourth National Conference on Outdoor Education was held at the Kellogg Gull Lake Biological Station in Michigan, October 22-24, 1970, with a total of 135 participants from 23 states and four Canadian provinces, and a representative from New Zealand.

The conference was sponsored by the Outdoor Education Project and the Council on Outdoor Education and Camping of the American Association for Health, Physical Education, and Recreation, and was designed to deal with educational issues, problems and challenges pertinent to outdoor education in the 70's. This fourth national conclave on outdoor education was primarily a working conference, making it impossible to prepare complete proceedings, since the study committee and task force reports will not be completed until the end of the Council's current year of operation. Some other features of the conference, such as the multi-media presentation of the Aspen (Colorado) outdoor education program, were impossible to report in written form.

It was decided to assemble copies of some of the presentations and summaries of the committee and task force deliberations and distribute them to the Conference participants and to members of the Council on Outdoor Education and Camping. Complete reports of the committees and task forces will be distributed to Council members when available.

It is hoped that the enthusiasm and interest in outdoor education exhibited at the conference will be reflected in these reports and summaries. Many in attendance felt that the 4th National Conference was a highlight in the series of outdoor education conferences held to date. Judging by the quality and scope of the conference, outdoor education is making a unique contribution to education generally and has great implications for improving the quality of the physical environment as well as enriching the lives of countless numbers who experience learning and adventure in the outdoors.

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OUTDOOR EDUCATION IN THE EDUCATIVE PROCESS

A Symposium

Presentation by JACK K. MAWDSLEY

Assistant Superintendent for
Instruction, Battle Creek (Michigan)
Public Schools

The Battle Creek program is one attempt to educate children "in and for" the out-of-doors.

Gagne states that "every type of learning requires a stimulus, and usually these stimuli must be located within the learning environment, outside the learner."

The Encyclopedia of Educational Research states: "Once the nature of the task to be learned and the characteristics of the learner are described, the conditions under which learning will occur can be specified."

Hilgard states that all learning theorists would agree on the following three learning theories:

- A motivated learner acquires what he learns more readily than one who is not motivated.
- Active participation by a learner is preferable to passive reception
- Transfer to new tasks will be better if the learner can discover relationships for himself.

Taking a cue from all of these references--that of providing the proper stimuli for the learner, specifying the conditions under which learning will occur, motivating the learner, and providing active participation and discovery opportunities--we, in Battle Creek see no better learning environment for many different types of educational programs than the out-of-doors.

Fortunately, thanks to the W. K. Kellogg Foundation, we have a 140-acre Outdoor Education Center which serves approximately 5,000 boys and girls yearly for five different grade levels.

Briefly, and in a capsule, we have three major thrusts: (1) a resident outdoor school program for fifth and sixth grade youngsters; (2) a farm and garden program for third and fourth grade students; and (3) a barnyard experience for first grade boys and girls.

Facility-wise, we have two winterized bunk houses, a main lodge including a dining hall and kitchen, several classrooms, a craft shop, an instructional materials center, a director's residence, three outdoor classroom laboratories, a farm house, barn, greenhouse, 21 cabins, a 20-acre pine plantation, many natural habitats including rolling

grasslands, a hardwood forest, a marsh area and all this on a beautiful little lake twelve miles northwest of Battle Creek called Clear Lake.

A permanent staff of 12 includes five full-time certified camp teachers, and other administrative and operational employees.

Our programs are based on the premise that all children should be exposed to the out-of-doors, so that an awareness can be developed which will lead to an understanding of man's dependence upon his natural environment.

Mentioned previously was an attempt to educate children "in and for" the out-of-doors.

The "in" means that we try to use the real world to provide experiences for children which are difficult, to say the least, to provide within four classroom walls. Included are such areas as plant biology, soil science, horticulture, animal husbandry, geography and ecology. We feel, too, that learning in other areas such as art, communications, music and other even more academic pursuits such as mathematics can also be enhanced in the out-of-doors.

The "for" means that we use outdoor education to orient children to use the out-of-doors for recreational, aesthetic and economic values. Skills developed here would include those used in archery, swimming, hiking, canoeing, casting, hunter safety, fire building, and rowing.

In these days of ever present problems involving students' abilities to get along with each other--the entire area of human relations--the outdoor education program offers youngsters the unusual experience of living together 24 hours a day. This experience contributes materially to each individual's social growth and understanding of others.

In addition to the three presently on-going programs, two new facilities are being planned at our center.

One will be a reconstructed log cabin that has been dismantled in Presque Isle County and moved to the center. It will be furnished with early artifacts related to homemaking, hunting and early agriculture. To demonstrate food preservation and storage techniques, a "Michigan cellar" and smokehouse will also be established along with outdoor areas to display log hewing, shingle making, and pit sawing with a crosscut.

The other addition will be a rustic type museum which will display artifacts related to agriculture and homemaking between 1850 and 1900 in Michigan.

These two facilities, we hope, will provide boys and girls with a good deal of insight into the problems and practices of their forefathers in making the state what it is today.

In a "nutshell," our program is only an attempt to give urban young people some out-of-door insights into their heritage, so that they might,

in future years, promote and participate in the wise utilization of man's most basic resource.

We invite you one and all to visit our Center.

Presentation by DONALD R. HAMMERMAN

Director, Lorado Taft Field Campus,
Northern Illinois University

We frequently hear outdoor education referred to as a commonsense approach to education. So let us begin by exploring a few myths concerning outdoor education as a commonsense approach to education.

1. Does it make sense for a teacher to leave the classroom where he has the latest texts and teaching equipment to take his pupils on a nature ramble?

2. Does it make sense to take students out of school for a whole week to a camp setting where they spend a lot of time just living together?

3. Does it make sense to transport youngsters from the inner city to a completely foreign environment, knowing they will have to return to the intolerable living conditions and the jaded existence of ghetto living afterwards?

The reply to each of these questions is, Yes, it makes sense to do these things. These are commonsense approaches to education -

- First, because instructional environments beyond the school provide a setting where learning takes on an immediacy and makes an impact not found in the textbook.

- Secondly, because there are things to be learned about one another, and about living together that we had better learn before it is too late.

- Thirdly, because inner city children need to become aware that the world is larger than their world of crowded tenements, dark alleys and gang rivalries. With the knowledge that my present world extends beyond me and what I am today, there may be the aspiration plus the motivation to either break out from my world, or to try and change it for the better.

We could probe each of these three elements in depth, but time doesn't permit. . . So let me simply touch upon some of the commonsense

qualities, characteristics, or principles of outdoor education in the educative process.

The first commonsense principle is that it makes a great deal of sense to carry on the business of learning in an instructional setting where that which is being studied may make the greatest impact on the learner. An almost inexhaustible number of instructional environments exist beyond the school which afford both teacher and learner an opportunity to be involved in and with a variety of firsthand experiences.

Direct experience exposes the learner to an assortment of sensory and perceptual data from which he may formulate new concepts and grasp other meanings so that prior knowledge is continually being refined and reconstructed.

The youngster who thought that the Papal Bull was really a cow kept in the Vatican to supply milk to the Pope's children, obviously hadn't formed a very accurate concept of cow.

The second commonsense element or component of outdoor education that I want to mention is inquiry as it relates to problem solving. Inquiry is the act of searching out data, usually through a process of first questioning--then investigating. Discovery occurs when the investigator-learner gains insight or knowledge of something previously unseen or unknown. The two processes--inquiry and discovery--work hand in hand in moving toward problem solutions.

> Inquiry leads to discovery . . .
> Discovery promotes insight . . .
> Insight provides understanding . . .
> Understanding contributes to knowledge . . . answers . . .
> And answers, in turn, lead to more questions . . . inquiry.

So we swing full cycle. There is at the same time closure, or an end in terms of having found some answers, and a beginning in terms of recognizing new problems.

Outside-the-school environments seem to lend themselves particularly to problem solving. In schools today little allowance is made for mistakes. Students with right answers are rewarded. Students with wrong answers penalized. I am not recommending that we place a premium on wrong answers, but I do suggest that it is probably just as important in the problem-solving process to allow problem solvers to arrive at unsatisfactory answers or solutions, as it is for them to finally arrive at an appropriate solution.

In problem-solving situations it is frequently necessary to derive so-called wrong answers in order to come up with right answers. As raw data are discovered, examined, rejected, and assimilated, a number of wrong answers may be absolutely essential to ultimately arrive at a workable solution. It is also true that there may be more than one workable solution--more than one reasonable response--more than one correct answer. Outdoor environments seem to provide the time and the space for students to learn from their mistakes.

Outdoor education presents educators with an instructional media through which students may experience for themselves the processes of scientific inquiry and problem solving. In this kind of learning environment students soon discover that all knowledge does not come from the book. We learn, furthermore, that there are few finite answers to anything.

In his book, Circle of the Seasons, Edwin Way Teale tells how for a number of years he pondered the question, "Can a dragonfly fly backward?" A quick, initial observation had suggested this possibility to him. However, he wasn't convinced. There was always the possibility that the dragonfly was being carried backward on the breeze. He found the evidence he needed, however, when one day he observed dragonflies moving backwards against the breeze. Teale went on to make this observation: "You can prove almost anything with the evidence of a small enough segment of time. How often in any search for truth, the answer of the minute is positive, the answer of the hour qualified, the answers of the year contradictory."

The third and final commonsense element of outdoor education that I will briefly mention is this: Extending the instructional setting beyond the school places the learner in an environment where he may respond with his total being . . . his body . . . his mind . . . his spirit. The learning organism is being bombarded with multiple, sensory stimuli not ordinarily found in the classroom. The learner responds as a total organism with motion and emotion . . . with thought and with feeling . . . and in ways known only to himself. It may well be the thoughts and feelings known only to oneself that are of highest value to an emerging, developing, self.

In closing, I will leave you with this thought of Nietzsche's, which I have paraphrased slightly. Writing on "The Future of Our Educational Institutions," he said:

> The woods, the rocks, the winds, the vulture, the flowers, the butterfly, the meads, the mountain slopes, must all speak to us in their own language: in them we must, as it were, come to know ourselves again in countless reflections and images, in a variegated round of changing visions: and in this way we will unconsciously and gradually feel the metaphysical unity of all things in the great image of nature, and at the same time tranquilize our souls in the contemplation of her eternal endurance and necessity.

I suggest to you that it is just as vital for today's youth, as well as for our own generation, to come to know ourselves . . . to be able to tranquilize our souls against the seemingly endless pressures of modern society, and finally, to recognize the ultimate endurance of the environment in which we are, after all, an inescapable fragment.

CHALLENGES TO OUTDOOR EDUCATION

Charles A. Blackman

Professor, Department of Secondary Education and Curriculum, Michigan State University

The conference has helped in sharing about the good of what is--of the details of outstanding programs . . . of the arenas in which the debate of today goes on--or should go on. This is good, but we need to take a long look down--or is it up--the road to the needs of tomorrow . . . to the identification of . . . to the anticipation of . . . the needs of new goals, new directions. There is need to guard against settling merely for wider installation of the many good programs and ideas described at the conference. Leaders in outdoor education cannot afford the luxury of protection from debate of a number of significant issues upon which there is not universal agreement among them. We must identify these issues and deal with them. Five issues, or questions, are suggested.

1. What does it really mean to carry on learning activities which contribute to the quality of living? Reference has been made to the quality of CARE . . . of our feeling for others . . . of experiencing joy and adventure . . . of concern for feeling . . . of a sense of beauty . . . of respect for human dignity . . . of a sense of self worth and of knowing who I am . . . of extending willingness to risk. How can our efforts contribute more effectively to these arenas? How can we deal more adequately with values and valuing? How can we concern ourselves more with the human and humane aspects of our world? (We must recognize, however, that as we identify qualities of living, we ourselves are in a valuing process.)

2. If education--and learning--are really life-long enterprises, how do we aid people to leave and re-enter--and use effectively--opportunities for learning? How do we work against the "once you've learned it, you've learned it" notion? How can we stop looking at "being educated," "having learned," "being prepared"--which are terminal ideas? How can we come to see ourselves as continuously preparing to teach? . . . as people who work not only with others where they are, but with ourselves where we are? . . to see such conferences as this in the context of the never-ending effort to look at the issues? . . . to see resources wherever they are, if they are useful? (In this latter area, it is hoped that we continue to see an ever greater mixing of school and college people in giving leadership to both initial and continuing professional preparation efforts.)

3. In talking about purposes and programs and methods, how can we help ourselves to see the teacher as human being--as the center of any effort to improve the quality of learning experiences for students? Do we need to be talking much more about staff development rather than merely curriculum development? Examples: (1) The impact is not measured by recommendations made or issues debated, or good programs shared. These are merely vehicles or ways through which our perceptions are changed. (2) In outdoor education programs at the secondary level the problems

aren't found in the subjects or in the existing curriculum or in organizational patterns, but rather in the way the staff looks at these--as frozen, rigid, unbending.

4. How can we strengthen the generalist's role as bridge builder? What is the role of the Council on Outdoor Education and Camping, if any, to aid in bringing together for dialogue many diverse groups which relate to our area of concern? How do we protect ourselves from being one more group of specialists? It should be noted that a good many of our present environmental problems are specialist-created by those whose focus has been so narrow that spill-over effects have remained unseen.

5. How can the current push for "accountability" be used as an opportunity for positive interpretation of the programs with which we work? Groups like this one are creative enough to find ways to document many of the outcomes we value by expanding the range of "currently acceptable terms." We can't develop outdoor education programs which deal effectively with the quality of life by the exclusive route of behaviorally stated objectives which are measurable. Experiencing the sunset . . . the joys of contemplation . . . the quality of zest--each of them loses its significant quality when subjected to this type of treatment. And, further, we reduce the options which may result from the internal motivation of the student. We may have to take the doubters to the top of the mountain . . . or let them witness the facial expressions of students . . . or let them hear the meaning ascribed by students--in order that they might feel the impact of the experience.

Thus, we've got to make our contribution to what constitutes "acceptable terms." We are where we are because one segment of our profession has spoken--and not because someone has discovered some all-pervasive absolutes.

CONFERENCE STUDY GROUPS

Outdoor Education for Inner City Schools

Edward W. Meyer, chairman

I. Analysis of Needs

A. Needs of the inner-city child
   1. Improve self image
   2. Develop confidence
   3. Establish social interaction
   4. Provide awareness, understanding and appreciation of diverse environments

B. Needs of program leaders (teachers, counselors)
   1. Develop self confidence
   2. Become aware of community resources
   3. Understand dynamics of the inner city
   4. Develop a degree of competency in outdoor education techniques and methodology

II. Methods of Meeting Needs

A. Building continuity of program based on school site investigations progressing to field trips, to day camps and resident camping--pre-planned for grades K-12

B. Coordinating with all helpful agencies

C. Incorporating challenges for each level of the program: physical, intellectual, social skill oriented

D. Personal contact with parents before and after to help in overcoming differences and establishing values

E. Relating to children in terms of their special needs such as language, literacy, food, clothing and other aspects of their lives in the inner city

F. In-service training, lectures and other devices to help teachers understand the inner city and its environment as it relates to the city as a whole

G. Providing incentives for experienced teachers to begin or continue work in inner cities; attempt to involve suburban teachers in the program via cumulative information, monetary rewards, etc.

H. Influencing schools of education, teachers' associations, etc. to motivate and direct teaching in inner-city schools

III. Problems of Meeting Needs

A. Financing
   1. Governmental self-help programs, such as Title I, Model Cities, PACE, HARP, Title III, etc.
   2. Involvement and cooperation with local, state and federal recreation or park departments in the immediate area
   3. Local community and conservation groups: Lions, Kiwanis, Sierra Club, National Wildlife Federation, etc., plus money drives, volunteer counselors and teachers
   4. New Environmental Education Act creating new agency in HEW - Office of Education
   5. Manpower administration (Department of Labor) may continue summer work-recreation support programs

B. Problems of ethnic nature, cultural heritage, and values of inner-city populations

Professional Preparation

Morris Wiener, chairman

The study group served as a vehicle for discussion, and indirectly as a source of information and direction for the Council's Committee on Professional Preparation.

Agenda was established by identifying issues, problems, and concerns of all in attendance based upon each individual's professional involvements and interests. In the process of searching for group direction, it was possible for all to recognize and sense the diversity of involvements of the participants. Random comments and discussion led to a focus upon examples of approaches in preparation, and to brief outdoor experiences used in preparation. An attempt was made in the final session to suggest directions for the Council committee that would be of help to the world of outdoor education.

The study group recommended that information concerning the following items would be of help to persons concerned with outdoor education:

1. What is professional preparation in outdoor education and who is involved?

2. What is and/or should be the direction of research in professional preparation for outdoor education?

3. What is the availability of training for special programs in outdoor education (e.g., blind, deaf, retarded, etc.)?

In the area of in-service preparation, the study group expressed concern for:

1. Who should be responsible for in-service preparation?
   - agencies
   - institutions of higher education
   - professionals within outdoor education
   - school districts

2. What kind of preparation for teachers is appropriate?
   - for teachers preparing for resident experience
   - for experienced teachers who are presently teaching in the classroom
   - for inexperienced teachers

3. What are desirable "proficiencies" that a person should gain through professional preparation in outdoor education? Who determines these proficiencies?

In the area of pre-service preparation, the study group expressed concern for:

1. Where, organizationally, within institutions of higher education,

does the pre-service of teachers for the world of outdoor education belong?

2. Who establishes the leadership roles in pre-service preparation for outdoor education?

3. What kinds of interdepartmental roles in higher education can be developed that would aid in the professional preparation of teachers for the world of outdoor education?

A further concern dealt with the relationship of pre-service to in-service preparation, and particularly how university-based persons might be more involved in the in-service preparation of teachers for outdoor education.

The study group took two specific positions in encouraging action:

1. Endorsed the ideas presented by Russel Bachert for developing a Directory of Degree and Non-degree Programs of Professional Preparation.

2. Went on record as strongly recommending that the Council <u>actively</u> recruit new membership.

School Site Development

Edwin W. Wichert, chairman

The study group has proposed a set of guidelines to change the perceptions of site use and to broaden the criteria for school site development to include the quality and volume of facilities needed to carry on excellent school-community curriculums and outdoor recreation programs.

In this age of accountability in terms of the local tax dollar, we must be more responsive to the concept of multiple use as well as present and future needs of our school communities.

We encourage schools to use these guidelines as a starting point even though we recognize that these guidelines need further development.

--Outdoor education teaching facilities on a school site should include:

(examples)

varied topography - if not available naturally, build
water area - pond, stream, swamp, lake
decaying vegetation - old logs, stumps, compost pile
plant succession - unmowed field or next to fence
animal homes - natural habitat and manmade
animal foods - plantings, trees, bird feeders
quiet areas - rocks, logs, grassy area, etc.
manmade structures - rock walls, water hydrant, concrete
hauled-in materials - gravel walks, landscaped areas, rock piles
open areas - paved areas, grassed, open air space
plant variety - plantings, ornamental and traditional
outdoor classrooms - natural hill, or depression can be manmade

--Physical education

When developing playfields for games and sports, creative play areas and creative apparatus, all-weather areas, we must consider all seasons, peak loads (classes, recess, and co-curricular use).

--Community recreation

Again, when developing the school site for the total neighborhood community in light of their recreation wants and needs, consider: play areas, paved multi-purpose courts, sports fields, free play areas, picnic area, passive and rustic natural areas, landscaping (buffer, beautification and special areas) and special facilities and areas.

The above approach to school site development will need extensive coordination in light of joint planning, financing, acquisition, programing and maintenance to insure the most effective use of this school site. Further, the school site plans should reflect the regulations of state and local governmental departments and agencies in terms of health, zoning and safety. Also, the site plan should follow the national, state and local recreation and park agency overall plans. And the educational specifications of local boards of education must be followed.

Work-Learn Experiences for Older Youth

George Fuge, chairman

Initial discussions of the study group centered on the types of programs presently in existence, the goals and values of these programs, and the place of these programs in the education of youth. This report contains a brief resume of the committee's reactions in each of these three areas.

Existing Programs

There are apparently a number of work-learn programs presently functioning in the educational systems. A complete survey would have to be taken to determine the actual range and scope of these programs. All members of the committee were aware of operating programs, and felt that the large majority of these programs were presently oriented to the "special" or "disadvantaged" student. Historically, these programs have functioned as stop-gap programs for correction of economic or social problems. The CCC is an excellent example of a work-learn program that was initially established to relieve an economic situation (unemployment) at the time. However, the committee was unanimous in its opinion that the educational, social and skill training values of these programs warrant development of these programs for all youth, rather than the special segments of our nation's youth.

Purpose and Goals of the Work-Learn Program

In support of its recommendation that the work-learn experience meets the needs of all youth, the committee outlined a listing of general goals relative to these needs.

1. The work-learn experience provides an opportunity for young people to develop an attitude of appreciation for the environment. ("Environment" is used in its broadest sense to include both natural and artificial.)
2. The work-learn experience provides students with an opportunity to develop a self image.
3. The work-learn experience provides a challenge for the student.
4. The work-learn experience involves students in constructive projects and provides each student with the opportunity to see the results of his efforts.
5. The work-learn experience provides students with the opportunity to develop manual skills and to realize the dignity of physical labor.
6. The work-learn experience provides opportunity for students to participate in constructive, relevant service to the community.

These goals and purposes are listed to emphasize the breadth and scope of the work-learn experience. Within the scope of these goals, the more specific objectives of individual programs may be developed.

During discussions, members of the committee made frequent reference to personal experiences that involved work-learn service to their school

and community. All felt that these projects involved much individual sacrifice and hard work that resulted in a feeling of pride in self, in group and in community. Committee members indicated that these experiences provided some of the most worthwhile educational moments of their lives.

The committee proposed three recommendations for the Outdoor Education Project:

1. That the Project actively support continued development of work-learn programs for all youth. It is suggested that the Project implement this recommendation by publicizing programs presently in operation.

2. That the Project take the initiative to stimulate federal action for development of work-learn programs on a national level. Leading educators have advocated federal service programs as an alternative to the draft and as a pre-college preparatory program. Such programs would center on conservation and environmental improvement projects.

3. That the Project, through the task force, further explore the extent and effectiveness of existing programs.

Outdoor Education for Environmental Quality

Reynold E. Carlson, chairman

The quality of living is dependent in large part on the quality of the environment. A quality environment involves clean air, water, adequate food, and wood and mineral resources, but it is also concerned with those things that give richness and variety to living; open space, elbow room, beauty and places for adventure. Education for a quality environment becomes a major concern for outdoor education.

Discussion centered around the following topics:

- The relation of outdoor education to the quality of living and the quality of the environment
- The desired scope and emphasis in the field of outdoor education
- Adaptation of outdoor education to various age groups and educational levels
- A recognition of the special needs for older youth and adults
- The need for cooperation between schools and community agencies
- Special concerns for high school age youth
- The responsibility for developing concern for action to bring about environmental improvement
- The need for programs with adventure, challenge and some "risk"

Goals for Outdoor Education

Vincent A. Cyphers, chairman

Outdoor education is an approach to teaching and a process through which learning experiences in all areas of the educational curriculum are provided. Natural, community and human resources beyond the traditional classroom are utilized as a motivation for learning and a means of broad curriculum enrichment and vitalization. Direct, first-hand learning opportunities involve the teacher and student in ecological explorations of the environment to develop and/or improve the knowledge, understanding, attitude, behavior, appreciations, values, skills and stewardship responsibility of the learner. Education in, for and about the physical and biotic environment is emphasized in order to achieve a wide variety of educational goals.

Proposed Goals for Outdoor Education

1. To help realize the full potential of the individual toward optimum development of the total person.

2. To provide stimulus and motivation for learning through full and constructive utilization of resources beyond the classroom.

3. To develop awareness, appreciation, understanding and respect for the natural environment and man's relationship and stewardship responsibility.

4. To develop knowledges, skills, attitudes, and appreciations for the constructive and creative use of leisure.

5. To promote democratic human relations and individual responsibility through outdoor learning and group living experiences.

6. To help the individual become more civic-minded through the utilization of resources within the community, state, nation and world.

7. To help the individual develop aesthetic interests and appreciations.

8. To help the individual become self-reliant in the outdoors.

9. To provide opportunities for the individual to engage in experiences which aid him to achieve an understanding of himself.

COUNCIL ON OUTDOOR EDUCATION AND CAMPING
American Association for Health, Physical Education, and Recreation

COMMITTEE ON RESEARCH AND EVALUATION
Report for 1970-71*

Betty van der Smissen, chairman

To many of those who are integrally involved in outdoor education programs, evaluation does not seem necessary, for to them the values of their programs are obvious--and evaluation procedures merely get in the way and are time consuming. To them the individual anecdotal records and results of opinionnaires to campers and parents suffice. However, this experience-wisdom based in emotion does not go very far with school administrators, the school board, and the citizen taxpayer--these want evidence of the contribution of outdoor education toward child growth and educational development before spending dollars and time to support outdoor education programs. The fine-sounding objectives and stated values need some substantiating proof.

There are several levels of "proof" which should be distinguished: (1) evaluation--the general judging or assessing the "success" or worthiness of some activity in terms of how the staff, parents, student participants, teachers, etc. perceive the value of the program. Simple opinionnaires and observations form the base of most evaluation; (2) evaluative research--the specific use of using the scientific process for purpose of making an evaluation, assessing the procedures, content, and impact of a program. It is a specific form of applied research whose primary goal is not the discovery of knowledge but rather a testing of the application of knowledge. Both evaluation and valuative research are directed toward administrative utilization of findings in planning development, and operation of programs; and (3) research--the systematic inquiry using the scientific process to assess the effectiveness of the program and with no intent for immediate administrative utilization. It is aimed at increasing understanding; it is a search for new knowledge regardless of the immediate value, although such research normally provides insight into interrelationships of variables. It is recognized that the "state of the art" at this time is evaluation in its most elementary form.

In discussing research, distinction should be made between research and information gathering. Research is concerned with the statement of a problem and a scientific process of inquiry to provide some direction in finding a solution for that problem. It may be necessary to gather information to help formulate alternative solutions. On the other hand, the gathering of information without the purpose of problem solving, but rather to determine the descriptive status of the present is a real need of the field; however, essential as such information is, such information gathering for descriptive purposes should not be erroneously referred to as research. Much of the present evaluation undertaken is information gathering, that is, telling what the present situation is. Although a valid research tool, most questionnaires presently are used primarily for information gathering.

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*Prepared by the study group on Research and Evaluation, National Conference on Outdoor Education, October 22-24, 1970, Hickory Corners, Michigan.

In approaching research and evaluation, it is evident that two aspects are of particular concern: (1) how to stimulate outdoor educators' interest in undertaking and/or utilizing research; and (2) identificacion of the substantive elements with which evaluation and research must be involved. The first is presented in Section I, "Mechanics to Facilitate Research," and the latter is in Section II, "Substantive Aspects of Research."

Section I

Mechanics to Facilitate Research

The following are specific suggestions made by the study group to the Council on Outdoor Education and Camping, specifically the Executive Committee. Certain recommendations also relate to allied organizations and institutions and the Council should facilitate implementation through working with these organizations and institutions.

1. Dissemination of research information

By research information is meant--where can one go to find out what instruments have been developed and are available, what projects are presently being pursued, which colleges and universities are active in outdoor education research and in what areas, what studies have been done in a particular area and where can they be obtained, where can consultant help be gotten to review a suggested study or assist in analysis. This dissemination is <u>not</u> meant to be full research reports.

It is suggested that the Outdoor Education Newsletter incorporate this type of information in the main body or an insert could be made to it periodically. Such information must be current.

2. Structure to insure that research and evaluation exchange is on-going

At the present time, such exchange is spasmodic. Because of the diversity of outdoor education personnel, national AAHPER conferences are not adequately reaching the people; state associations do not have structures for the most part which can facilitate dissemination in an on-going way. While no suggestion is made as to the appropriate structure, certainly the pending reorganization of AAHPER and the position of the Council within that organization's structure is of utmost concern and interest in this regard.

3. Utilization of ERIC as a resource

Two facets are of special importance--input and output. ERIC has one of the finest descriptor systems for identification of material; in addition, it has extensive breadth of scope in its resource listings. Outdoor education is one of five areas of special concern for the ERIC located at New Mexico State University. It is essential that anyone with a document of any type which might be of interest to others in the field be filed with ERIC, for through it, then, full dissemination can take place. This is especially important when only one or a very limited number of copies

is available for distribution. Without regular input from all, ERIC cannot serve as adequately as it could. On the other hand, its output should be more highly utilized by all.

4. Substantive synthesis--analysis aspect

While ERIC and other bibliographic sources are very useful in identifying documents, most local educators as well as college and university personnel need substantive synthesis and analysis of these documents. For example, what does research tell about social relationships as affected by an outdoor education experience; what tools are available to assess this and how good are they? Or, what impact does certain outdoor education methodology have on cognitive aspects, such as arithmetic, reading?

Such analysis requires availability of many sources and skills in making such analyses; therefore, it is recommended that one or more institutions or centers be designated or undertake at their own initiative such synthesis and analysis. At this time Pennsylvania State University has a publication which is nearly complete and which would provide a good beginning in this aspect.

5. Presentation and discussion of research

It is recommended that greater efforts be made to make presentations at conferences and publish reports in journals of organizations allied to the field, such as Science and Children, American Educational Research Association, AAAS. At the AAHPER national convention, at least one-half day should be devoted to research reports; too often only program descriptions are reported at conventions.

6. Assistance in developing technical research competency

The present professional preparation and association programs do not provide much opportunity to gain competence in research skills; therefore, it is recommended that (1) more efforts be made to team up local schools with programs with universities and colleges interested in research; and (2) a series of workshops or clinics be held on various technical aspects under the auspices of the national Council and by state associations.

7. Council committees

Evaluation and research is not the perogative of one committee of the Council, although leadership can emanate therefrom. Research is integral to the whole operation; therefore, it is recommended that each Council committee be concerned with (1) what research there is that relates to the work of that committee; (2) what questions should be answered by research in relation to the committee's area of concern; and (3) what impact there is on research by the committee. An excellent example of committee concern might be the Task Force on Goals. One of the key considerations in research is how to measure the outcomes in relation to objectives or goals. Are the goals stated so that they may be translated into actionable experiences which can be tested by research, into intermediate objectives which also can be measured? Are the goals unique or definitive? Are the goals

nice-sounding platitudes to which all education subscribed? A second illustration relates to outdoor education and environmental quality.

Section II

Substantive Aspects of Research

The work of George Donaldson published by ERIC is recognized in regards to pointing up substantive aspects needing research; therefore, only a few key areas of research are suggested as ones of special concern. There are, however, several general concerns regarding substantive research.

1. Longitudinal studies

   The real "proof of the pudding" is not in a simple pre-/post-test over a five-day period of resident programing, but rather what the impact is one month later, one year--yes, even ten or more years later. Just what is the change in behavior of an adult who experienced outdoor education programs?

2. "Change" criteria and instrumentation

   Efforts must be made to develop more definitive change criteria for assessing impact, that is, instruments to measure change must be developed in all areas.

3. Assessment of many types of outdoor education programing

   At the present time, undoubtedly because of the greater ease in obtaining the group and controlling variables, most research has been done utilizing the resident outdoor education program. Research needs to be undertaken in all types of outdoor education programing, assessing the type specifically and comparatively.

The areas of research are classified into two primary categories--operational and objectives. In the first are those which go to program structural determinants; the latter encompass participant outcomes.

Structural Determinants

a. How long should an experience be? Can as much be accomplished in two days as in five days? Would a series of one-day each of five weeks be as effective as five consecutive days? What can be accomplished by different lengths of stay and settings? Does length of program have a longer lasting impact?

b. What type of training should outdoor education teachers have? Is interval training better than longer session training, that is, a series of one-day workshops or sessions for five weeks in contrast to a five consecutive days program? Can a teacher obtain the necessary stimulation and understanding in a demonstration session or must he have a "direct experience?"

c. What is the comparative effect of various methods used in outdoor instruction? Outdoor methods compared to "indoor" methods? Contrast the small discovery group with more formal instructional groups.

d. Cost benefit analysis--how does one get the most for his money?

e. How does one determine what should be taught outdoors and what indoors? "Teach what can best taught outdoors, outdoors; what best indoors there"--what is best taught where?

Objectives

The key question asked by those challenging the necessity of providing outdoor education experiences is "how do you know you are meeting your objectives?" They are seeking some proof obtained through systematic process. The objectives focus upon behavioral aspects--participant outcomes. Goals and objectives must be translatable into actionable experiences to realize the goals and objectives on which program is based.

a. How does the program affect understanding of the environment? What does the outdoor education program contribute towards environmental quality?

b. What happens to students in terms of behavior change as expressed in adult citizen action. What involvement in the community environmental concerns does a person who has experienced an outdoor education program have?

c. In the cognitive domain, what understandings and knowledges are evidenced?

d. How is the group relationship affected by an outdoor program?

e. In what way does an outdoor education program contribute to the affective domain? The psychomotor domain?

These foregoing are but a few of the many areas toward which research might profitably be directed.

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